

US EPA ARCHIVE DOCUMENT



ALB Engineering & Technology, PLLC

**Mining, Civil, Environmental Engineering
& Information Technology**

PO BOX 166, Hebron, KY 41048

Phone: (859) 982-9468 Fax: (859) 918-1516

March 28, 2010

Mr. Ross Bishop
Division of Water
200 Fair Oaks Lane
Frankfort, Kentucky 40601

RE: Mitco Enterprises, Inc.
KPDES #: KYG046385
DNR #: 826-0630

Mr. Bishop:

Please find enclosed Form 1, Form C and SDAA for the above-referenced permit application for individual permit coverage under KPDES. The application filing fee \$660 has already been paid to DOW.

Should you have any questions and/or comments regarding this application please contact me at (859) 982-9468 or e-mail me at ballen@albEngrTech.com.

Respectfully submitted,

Beibei Allen, Ph.D., P.E.
President of ALB Engr. & Tech, PLLC
Director of Engineering & Permitting of
Jadco Enterprises, Inc.
Mitco Enterprises, Inc.
Big Valley Coal, LLC



STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

January 15, 2010

Charlie Collins
Mitco Enterprises, Inc.
19485 South Highway 66
PO Box 38
Beverly, KY 40913

Re: KPDES Application Notice of Deficiency
KPDES No.: KY0108448
Brutus #2 Mine / 826-0630
AI ID: 104987
Clay County, Kentucky

Dear Mr. Collins:

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on January 14, 2010. A completeness review of your permit application has been conducted and the application has been determined to be incomplete. Please complete the deficiencies listed below and return to me at the following address within thirty (30) days of the date of this letter.

Division of Water, Surface Water Permits Branch
ATTN: Mr. Erich Cleaver
200 Fair Oaks Lane
Frankfort, Kentucky 40601

1. Due to changes in the Division's antidegradation requirements, all new or expanded facilities must submit a Socioeconomic Demonstration and Alternatives Analysis (SDAA). A copy of the form can be accessed online at http://www.water.ky.gov/homepage_repository/kpdes_permit_aps.htm
2. Please be advised that the KPDES application filing fee for an Individual Surface Mining is 660.00. Submit the remaining KPDES application filing fee in the amount of \$420.00. Your check should be made payable to "Kentucky State Treasurer."

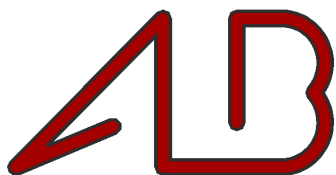
Failure to respond within thirty (30) days may result in the Cabinet returning your application to you and retaining filing fees that have been paid, as per 401 KAR 5:300, Section 2(2). If you have any questions concerning this request, please contact me at (502) 564-3410, extension 4917 or by e-mail at Erich.Cleaver@ky.gov.

Sincerely,

Erich Cleaver
Surface Water Permits Branch
Division of Water

ESC:

Cc: Beibei Allen – ALB Engineering & Technology
TEMPO



ALB Engineering & Technology, PLLC

**Mining, Civil, Environmental Engineering
& Information Technology**

PO BOX 166, Hebron, KY 41048

Phone: (859) 982-9468 Fax: (859) 918-1516

December 14, 2009

Mr. Ross Bishop
Division of Water
200 Fair Oaks Lane
Frankfort, Kentucky 40601

RE: Mitco Enterprises, Inc.
KPDES #: KYG046385
DNR #: 826-0630

Mr. Bishop:

Please find enclosed Form 1 and Form C for the above-referenced permit application for individual permit coverage under KPDES. The application filing fee \$240 should have been already mailed to DOW the last week.

Should you have any questions and/or comments regarding this application please contact me at (859) 982-9468 or e-mail me at ballen@albEngrTech.com.

Respectfully submitted,

Beibei Allen, Ph.D., P.E.
President of ALB Engr. & Tech, PLLC
Director of Engineering & Permitting of
Jadco Enterprises, Inc.
Mitco Enterprises, Inc.
Chas Coal, LLC
Big Valley Coal, LLC



STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

October 30, 2009

Mr. Charles Collins
Mitco Enterprises, Inc
P.O. Box 115; Hwy 66
Beverly, KY 40913

Re: Wiles Branch; Clay County
KPDES #: KYG046385
DNR #: 826-0630
AI #: 104987

Dear Mr. Collins

In reviewing the NOI-CM for the DNR permit #826-0630, the Division of Water (DOW) determined that the operation proposes to discharge to Bullskin Creek via Wiles Branch. Recent DOW ambient watershed monitoring identified Bullskin Creek as an excellent supporting water for all biological communities. In accordance with Division of Water policy (Part III-B, item 14) of the Coal General Permit, those operations which discharge or propose to discharge to such receiving streams are excluded from general permit coverage and must obtain an Individual KPDES Permit.

For your convenience the necessary forms for an Individual Permit can be obtained at http://www.water.ky.gov/homepage/repository/kpdes_permit_aps.htm. Please complete KPDES Forms 1 & C and return these forms with the filing fee of \$240.00 to the address shown on the forms.

If you have any questions regarding the Division's decision, please contact me at (502) 564-3410, extension 4895, or by e-mail at larry.dusak@ky.gov.

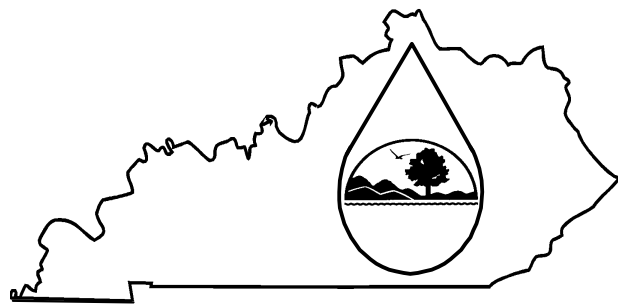
Sincerely,

Lawrence J. Dusak
Operational Permits Section
Surface Water Permits Branch
Division of Water

LJS:ljd

c: Debbie Haggard - Eng Consulting Services, Inc
Division of Mine Permits

KPDES FORM 1



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☒ Apply for a new permit.
☐ Apply for reissuance of expiring permit.
☐ Apply for a construction permit.
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Form SC

For additional information contact:

Surface Water Permits Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION

AGENCY
USE

A. Name of Business, Municipality, Company, Etc. Requesting Permit
Mitco Enterprises, Inc.

B. Facility Name and Location

Facility Location Name:

Brutus #2 Mine

Facility Location Address (i.e. street, road, etc., **not P.O. Box**):

0.3 mile East of Brutus on KY 1482

Facility Location City, State, Zip Code:

Brutus, KY 40972

D. Owner's name (if not the same as in part A and C):
Charlie Collins

Owner's Mailing Address: PO Box 115, HWY 66, Beverly, KY 40913

C. Primary Mailing Address (all facility correspondence will be sent to this address).

Facility Contact Name and Title: Mr. ☒ Ms. ☐

Charlie Collins

Mailing Address:

PO Box 38, 19485 South Highway 66

Mailing City, State, Zip Code:

Beverly, KY 40913

Facility Contact Telephone Number:

(606) 596-0110

Owner's Telephone Number (if different):
(606) 596-0111

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc:

Surface re-mining (auger) the Hazard No. 4 coal seam at elevation of 1220' under DNR Permit No. 826-0630. The permit includes 36.58 acres of surface disturbance and 244.38 acres of underground disturbance. Total 18 sediment control structures (SS-001 to 018) are to be built to control surface drainage.

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code &
Description:

1221 Bituminous Coal and Lignite-Surface Mining

Other SIC Codes:

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 1/2 minute quadrangle map for the site. (See instructions)

B. County where facility is located:
Clay

City where facility is located (if applicable):
Brutus

C. Body of water receiving discharge:
Bullskin Creek

D. Facility Site Latitude (degrees, minutes, seconds):
37-14-48

Facility Site Longitude (degrees, minutes, seconds):
83-34-11

E. Method used to obtain latitude & longitude (see instructions): Topo map coordinates

IV. OWNER/OPERATOR INFORMATION**A. Type of Ownership:**

☐ Publicly Owned ☐ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:

Telephone Number:

Operator Mailing Address (Street):

Operator Mailing Address (City, State, Zip Code):

Is the operator also the owner?

Yes ☐ No ☐

Is the operator certified? If yes, list certification class and number below.

Yes ☐ No ☐

Certification Class:

Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:

KYG046385

Issue Date of Current Permit:

Expiration Date of Current Permit:

Other DOW Operational Permit #:

Kentucky DMR Permit Number(s):

Sludge Disposal Permit Number:

826-0630

Other Existing Environmental Permit #:

Other Existing Environmental Permit #:

Other Existing Environmental Permit #:

Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):

Beibei Allen, PhD, PE

DMR Official Telephone Number:

(859) 982-9468

B. DMR Mailing Address:

- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:

ALB Engineering & Technology, PLLC

DMR Mailing Address:

2182 Blair Dr.

DMR Mailing City, State, Zip Code:

Hebron, KY 41048


VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed in "Form 1 Instructions" and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. For permit renewals, please include the KPDES permit number on the check to ensure proper crediting. Please see the separate document "General Instructions" for an expanded description of the base fee amounts.

Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$240

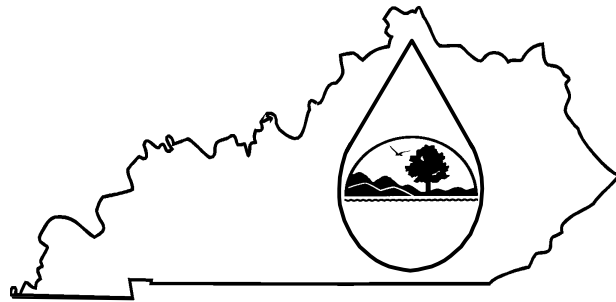
VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	PHONE NUMBER: (606) 596-0111
Mr. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> Charlie Collins, President	EMAIL: ccollins@jadco-enterprises.com
SIGNATURE 	DATE: 12/09/2009

Return completed application form and attachments to: **Surface Water Permits Branch, Division of Water, 200 Fair Oaks Lane, Frankfort, KY 40601. Direct questions to: Surface Water Permits Branch at (502) 564-3410.**

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact Surface Water Permits Branch, (502) 564-3410.

Name of Facility: Mitco Enterprises, Inc.

County: Clay

I. OUTFALL LOCATION

AGENCY
USE

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
SS-001	37	14	49	83	34	59	Wiles Branch
SS-002	37	14	56	83	33	54	Wiles Branch
SS-003	37	15	06	83	33	02	Wiles Branch
SS-004	37	15	10	83	34	52	Wiles Branch
SS-005	37	15	13	83	33	42	Wiles Branch
SS-006	37	15	16	83	33	30	Wiles Branch
SS-007	37	15	20	83	33	20	Wiles Branch
SS-008	37	15	24	83	33	28	Wiles Branch
SS-009	37	15	34	83	33	30	Wiles Branch
SS-010	37	15	44	83	33	27	Wiles Branch
SS-011	37	15	53	83	33	25	Wiles Branch
SS-012	37	15	01	83	33	36	Wiles Branch
SS-013	37	15	54	83	33	36	Wiles Branch
SS-014	37	15	45	83	33	37	Wiles Branch
SS-015	37	15	40	83	33	43	Wiles Branch
SS-016	37	15	32	83	33	44	Wiles Branch
SS-017	37	15	25	83	33	46	Wiles Branch
SS-018	37	15	25	83	33	55	Wiles Branch

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
SS-001	Surface runoff	23.12 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-002	Surface runoff	53.55 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-003	Surface runoff	24.86 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-004	Surface runoff	23.27 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-005	Surface runoff	44.35 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-006	Surface runoff	33.56 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-007	Surface runoff	32.96 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-008	Surface runoff	22.63 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-009	Surface runoff	26.91 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-010	Surface runoff	27.08 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-011	Surface runoff	42.13 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-012	Surface runoff	42.67 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-013	Surface runoff	45.24 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-014	Surface runoff	33.36 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-015	Surface runoff	34.32 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-016	Surface runoff	26.20 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-017	Surface runoff	21.48 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A
SS-018	Surface runoff	32.84 cfs (peak)	Sedimentation Discharge to surface water	1-U 4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER	OPERATIONS CONTRIBUTING FLOW	FREQUENCY		FLOW				
		Days Per Week	Months Per Year	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	
(list)	(list)	(specify average)	(specify average)					

III. PRODUCTION

- A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
- ☐ Yes (Complete Item III-B) List effluent guideline category:
- ☒ No (Go to Section IV)
- B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?
- ☐ Yes (Complete Item III-C) ☒ No (Go to Section IV)
- C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

AVERAGE DAILY PRODUCTION			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

- A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.
- ☐ Yes (Complete the following table) ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

- B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

- A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

- D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐

Yes (Identify the test(s) and describe their purposes below)

☒

No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒

Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)


☐

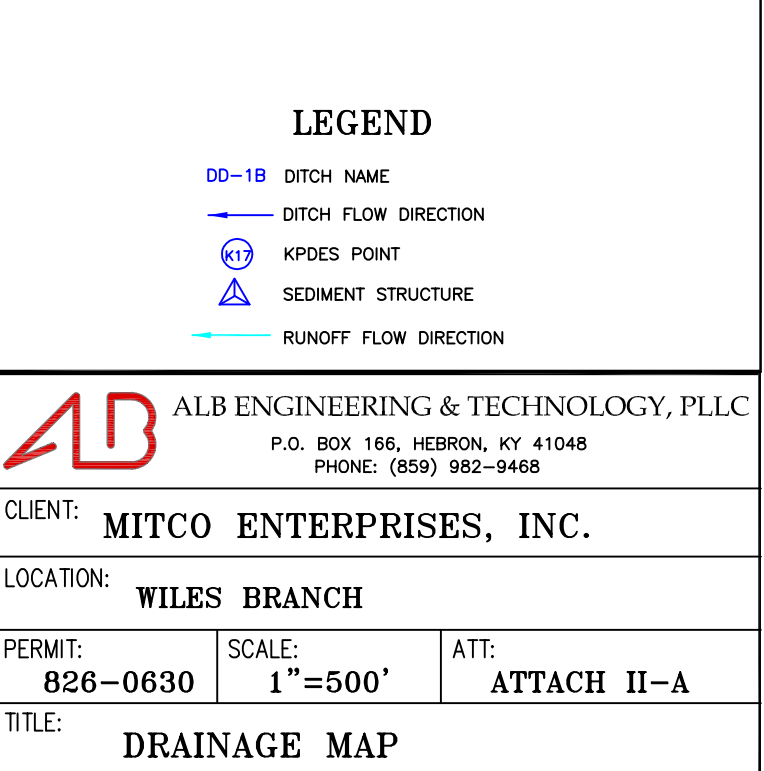
No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Appalachian State Analytical	181 Longview Drive Pikeville, KY 41501	(606) 437-5616	Total Suspended Solids Flow Conductivity pH Hardness (as mg/l CaCO ₃) Sulfate (as SO ₄) Total Recoverable Aluminum Total Recoverable Iron Total Recoverable Manganese Total Recoverable Antimony Total Recoverable Arsenic Total Recoverable Beryllium Total Recoverable Cadmium Total Recoverable Chromium Total Recoverable Copper Total Recoverable Lead Total Recoverable Mercury Total Recoverable Nickel Total Recoverable Selenium Total Recoverable Silver Total Recoverable Thallium Total Recoverable Zinc Free Cyanide Total Phenols

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Charlie Collins, President	(606) 596-0110
SIGNATURE 	DATE 12/09/2009



PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.		
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	6.0						1	mg/l				
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE 0.258		VALUE		VALUE		1	MGD		VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°c		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°c		VALUE		
i. pH	MINIMUM 6.96	MAXIMUM	MINIMUM	MAXIMUM			1	STANDARD UNITS				

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)		X												
b. Chloride		X												
c. Chlorine, Total Residual		X												
d. Color		X												
e. Fecal <input type="checkbox"/> Coliform Or E.coli <input type="checkbox"/>		X												
f. Fluoride (16984-48-8)		X												
g. Hardness (as CaCO ₃)	X		65.2						1	mg/l				
h. Nitrate – Nitrite (as N)		X												
i. Nitrogen, Total Organic (as N)		X												
j. Oil and Grease		X												
k. Phosphorous (as P), Total 7723-14-0		X												
l. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium Total		X												
(4) Radium, 226, Total		X												
(5) Strontium- 90, Total		X												
(6) Uranium		X												

Part B - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
m. Sulfate (as SO ₄) (14808-79-8)	X		6						1	mg/l				
n. Sulfide (as S)		X												
o. Sulfite (as SO ₄) (14286-46-3)		X												
p. Surfactants		X												
q. Aluminum, Total (7429-90)	X		0.136						1	mg/l				
r. Barium, Total (7440-39-3)		X												
s. Boron, Total (7440-42-8)		X												
t. Cobalt, Total (7440-48-4)		X												
u. Iron, Total (7439-89-6)	X		<0.03						1	mg/l				
v. Magnesium Total (7439-96-4)		X												
w. Molybdenum Total (7439-98-7)		X												
x. Manganese, Total (7439-96-6)	X		0.01						1	mg/l				
y. Tin, Total (7440-31-5)		X												
z. Titanium, Total (7440-32-6)		X												

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark “X” in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS															
1M. Antimony Total (7440-36-0)			X	<0.002						1	mg/l				
2M. Arsenic, Total (7440-38-2)			X	<0.001						1	mg/l				
3M. Beryllium Total (7440-41-7)			X	<0.0002						1	mg/l				
4M. Cadmium Total (7440-43-9)			X	<0.002						1	mg/l				
5M. Chromium Total (7440-43-9)			X	0.001						1	mg/l				
6M. Copper Total (7550-50-8)			X	0.001						1	mg/l				
7M. Lead Total (7439-92-1)			X	<0.001						1	mg/l				
8M. Mercury Total (7439-97-6)			X	<0.0002						1	mg/l				
9M. Nickel, Total (7440-02-0)			X	<0.005						1	mg/l				
10M. Selenium, Total (7782-49-2)			X	<0.002						1	mg/l				
11M. Silver, Total (7440-28-0)			X	<0.001						1	mg/l				

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
12M. Thallium, Total (7440-28-0)		X		<0.0007						1	mg/l				
13M. Zinc, Total (7440-66-6)		X		0.005						1	mg/l				
14M. Cyanide, Total (57-12-5)		X		<0.004						1	mg/l				
15M. Phenols, Total		X		<0.004						1	mg/l				
DIOXIN															
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:											
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X												
5V. Bromoform (75-25-2)			X												
6V. Carbon Tetrachloride (56-23-5)			X												
7V. Chloro- benzene (108-90-7)			X												
8V. Chlorodibromomethane (124-48-1)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
9V. Chloroethane (74-00-3)			X												
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X												
12V. Dichloro- bromomethane (75-71-8)			X												
14V. 1,1- Dichloroethane (75-34-3)			X												
15V. 1,2- Dichloroethane (107-06-2)			X												
16V. 1,1- Dichlorethylene (75-35-4)			X												
17V. 1,2-Di- chloropropane (78-87-5)			X												
18V. 1,3- Dichloropro- pylene (452-75-6)			X												
19V. Ethyl- benzene (100-41-4)			X												
20V. Methyl Bromide (74-83-9)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
21V. Methyl Chloride (74-87-3)			X												
22V. Methylene Chloride (75-00-2)			X												
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X												
24V. Tetrachloro- ethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X												
27V. 1,1,1-Tri- chloroethane (71-55-6)			X												
28V. 1,1,2-Tri- chloroethane (79-00-5)			X												
29V. Trichloro- ethylene (79-01-6)			X												
30V. Vinyl Chloride (75-01-4)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chloro-phenol (95-57-8)			X												
2A. 2,4-Dichlor-Orophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (105-67-9)			X												
4A. 4,6-Dinitro-o-cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-chloro-m-cresol (59-50-7)			X												
9A. Pentachlorophenol (87-88-5)			X												
10A. Phenol (108-05-2)			X												
11A. 2,4,6-Trichlorophenol (88-06-2)			X												
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
2B. Acena- phtylene (208-96-8)			X												
3B. Anthra- cene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo(a)- anthracene (56-55-3)			X												
6B. Benzo(a)- pyrene (50-32-8)			X												
7B. 3,4-Benzo- fluoranthene (205-99-2)			X												
8B. Benzo(ghi) perylene (191-24-2)			X												
9B. Benzo(k)- fluoranthene (207-08-9)			X												
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)			X												
11B. Bis (2-chlor- oisopropyl)- Ether			X												
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)			X												
14B. Butyl-benzyl phthalate (85-68-7)			X												
15B. 2-Chloro-naphthalene (7005-72-3)			X												
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)			X												
17B. Chrysene (218-01-9)			X												
18B. Dibenzo-(a,h) Anthracene (53-70-3)			X												
19B. 1,2-Dichloro-benzene (95-50-1)			X												
20B. 1,3-Dichloro-Benzene (541-73-1)			X												
21B. 1,4-Dichloro-benzene (106-46-7)			X												
22B. 3,3-Dichloro-benzidene (91-94-1)			X												
23B. Diethyl Phthalate (84-66-2)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
24B. Dimethyl Phthalate (131-11-3)			X												
25B. Di-N- butyl Phthalate (84-74-2)			X												
26B. 2,4-Dinitro- toluene (121-14-2)			X												
27B. 2,6-Dinitro- toluene (606-20-2)			X												
28B. Di-n-octyl Phthalate (117-84-0)			X												
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)			X												
30B. Fluoranthene (208-44-0)			X												
31B. Fluorene (86-73-7)			X												
32B. Hexachloro- benzene (118-71-1)			X												
33B. Hexachloro- butadiene (87-68-3)			X												
34B. Hexachloro- cyclopenta- diene (77-47-4)			X												

Part C – Continued

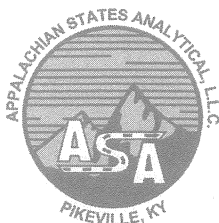
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
35B. Hexachlo- roethane (67-72-1)			X												
36B. Indneo- (1,2,3-oc)- Pyrene (193-39-5)			X												
37B. Isophorone (78-59-1)			X												
38B. Napthalene (91-20-3)			X												
39B. Nitro- benzene (98-95-3)			X												
40B. N-Nitroso- dimethyl- amine (62-75-9)			X												
41B. N-nitrosodi-n- propylamine (621-64-7)			X												
42B. N-nitro- sodiphenyl- amine (86-30-6)			X												
43B. Phenan- threne (85-01-8)			X												
44B. Pyrene (129-00-0)			X												
45B. 1,2,4 Tri- chloro- benzene (120-82-1)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)			X												
2P. α-BHC (319-84-6)			X												
3P. β-BHC (58-89-9)			X												
4P. gamma-BHC (58-89-9)			X												
5P. δ-BHC (319-86-8)			X												
6P. Chlordane (57-74-9)			X												
7P. 4,4’-DDT (50-29-3)			X												
8P. 4,4’-DDE (72-55-9)			X												
9P. 4,4’-DDD (72-54-8)			X												
10P. Dieldrin (60-57-1)			X												
11P. α- Endosulfan (115-29-7)			X												
12P. β- Endosulfan (115-29-7)			X												
13P. Endosulfan Sulfate (1031-07-8)			X												
14P. Endrin (72-20-8)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
15P. Endrin Aldehyde (7421-93-4)			X												
16P. Heptachlor (76-44-8)			X												
17P. Heptaclor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												



APPALACHIAN STATES ANALYTICAL, L.L.C.

PO Box 520
Shelbiana, KY 41562

Delta Testing Inc

PO Box 1711
Hyden, KY 41749
ATTN: Joe LewisDate Received 3/05/10
Date Reported 3/18/10
Order Number 2010-02447

TEST DESCRIPTION	RESULT	UNITS	METHOD	MDL	DATE	TECH
Fraction	2010-02447001					
Sample I.D	Mitco-Wiles Br.		824 -0622			
Date Sampled	3/04/2010					
Flow	NDP	mgd			3/04/2010	CLT
pH, Field	NDP	std	SM 4500 H+ -B	0.03	3/04/2010	CLT
Aluminum, Total Recoverable	0.136	mg/l	SM 3113 B	0.002	3/15/2010	LMS
Iron, Total Recoverable	<0.03	mg/l	SM 3111 B	0.03	3/08/2010	SJ
Manganese, Total Recoverabl	0.01	mg/l	SM 3111 B	0.01	3/08/2010	LMS
Antimony, Total Recoverable	<0.002	mg/l	SM 3113 B	0.002	3/10/2010	LMS
Arsenic, Total Recoverable	<0.001	mg/l	SM 3113 B	0.001	3/12/2010	SJ
Beryllium, Total Recoverable	<0.0002	mg/l	SM 3113 B	0.0002	3/16/2010	SJ
Cadmium, Total Recoverable	<0.002	mg/l	SM 3113 B	0.0002	3/08/2010	SJ
Chromium, Total Recoverable	0.001	mg/l	SM 3113 B	0.001	3/09/2010	SJ
Copper, Total Recoverable	0.001	mg/l	SM 3113 B	0.001	3/15/2010	LMS
Lead, Total Recoverable	<0.001	mg/l	SM 3113 B	0.001	3/08/2010	LMS
Mercury, Total Recoverable	<0.0002	mg/l	SM 3112 B	0.0002	3/10/2010	TT
Nickel, Total Recoverable	<0.005	mg/l	SM 3111 B	0.005	3/08/2010	SJ
Selenium, Total Recoverable	<0.002	mg/l	SM 3113 B	0.002	3/13/2010	SJ
Silver, Total Recoverable	<0.001	mg/l	SM 3113 B	0.001	3/16/2010	LMS
Thallium, Total Recoverable	<0.0007	mg/l	EPA 200.9	0.0007	3/10/2010	SJ
Zinc, Total Recoverable	0.005	mg/l	SM 3111 B	0.005	3/17/2010	SJ
Free Cyanide	<0.004	mg/l	SM 4500CN-E	0.004	3/10/2010	AH
Phenols, Ky KPDES P Renewal	<0.004	mg/l	EPA 420.1, Hach 8047	0.004	3/12/2010	SC
Temperature	NDP	C	SM 2550 B	0.4	3/04/2010	CLT

* May not be within monthly permit requirements.

MAR 24 2010

Received
MB

Submitted By:

Shannon Chapman

DELTA TESTING, INC

BOX 1711
HYDEN, KY. 41749
(606)672-3452

Sample Type Surface Water-Grab sample
AREA: Miles Br. Clay Co-MITCO JOB #826-0622
COMPANY: B&W RESOURCE
SAMPLE # SW2
Date Sampled 3-4-2010
Lat/Long 37 15 07 / 83 34 10

Flow	0.3990 CFS	Method	MDL
Conductance	166 Uhoms/cm	Volumetric	N/L
pH	6.96	SM2510-B	N/L
Acidity	0 mg/l	SM4500-H	N/L
Alkalinity	11 mg/l	SM2310-B	N/L
TSS	6 mg/l	SM2320-B	N/L
Sulfate	6 mg/l	SM2540-D	N/L
Hardness	65.2 mg/l	SM4500-SO4-E	1mg/l
		SM2340-B	N/L

Submitted by



Joe R. Lewis -Lab Director

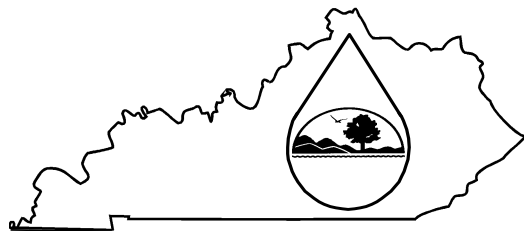
N/L-Not Listed

Analysis in accordance with "Standard Methods for the Analysis of Water and Wastewater"

MAR 24 2010

Received
(MB)

KPDES FORM SDAA



Kentucky Pollutant Discharge Elimination System (KPDES)

Socioeconomic Demonstration and Alternatives Analysis

The Antidegradation Implementation Procedure found in 401 KAR 10:030, Section 1(3)(b)3 requires KPDES permit applications for new or expanded discharges to waters categorized as "Exceptional or High Quality Waters" to conduct a socioeconomic demonstration and alternatives analysis to justify the necessity of lowering local water quality to accommodate important economic or social development in the area in which the water is located. This demonstration shall include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Project Information

Facility Name: Mitco Enterprise, Inc.

Location: 19485 South Highway 66, Beverly, KY 40913

County: Clay

Receiving Waters Impacted: Wiles Branch of Bullskin Creek

II. Socioeconomic Demonstration

1. Define the boundaries of the affected community:

(Specify the geographic region the proposed project is expected to affect. Include name all cities, towns, and counties. This geographic region must include the proposed receiving water.)

The proposed project utilizes existing bench to highwall mine the Hazard #4 seam at elevation of 1220' with the DNR permit No. 826-0630. The permit affects 36.58 surface acres and 244.38 underground acres with the total permit acreage of 280.96. The mine site is located 0.3 mile east of the community of Brutus on KY 1482 in Clay county. The Latitude and Longitude is 37-14-48 and 83-34-11, respectively; it is located within the Mistletoe and Big Creek 7.5 minute quadrangles. The nearest receiving stream is Wiles Branch which flows into the Bullskin Creek of the South Fork Kentucky River.

2. The effect on employment in the affected community:

(Compare current unemployment rates in the affected community to current state and national unemployment rates. Discuss how the proposed project will positively or negatively impact those rates, including quantifying the number of jobs created and/or continued and the quality of those jobs.)

As shown in the following table, the unemployment rate of October, 2009 in Clay county is 13.8%, which is a 34% increase from 2008 unemployment rate of 10.3%. The unemployment rate in Clay county is generally higher than the labor market area.

The proposed mining operation will directly provide high-pay jobs for at least 15 people on site during the life of the operation and indirectly support 25 employees who work in the mining supporting industries, such as material and equipment supply company, as well as other services, such as engineering consulting, training, state regulatory agent and permit reviewers.

With the current tough economic situation nationwide, job creation is the highest priority of government task.

This new mine will provide a precious opportunity for job-seekers, or at the very least, it will avoid an increase in unemployment rate by continually employing 10 workers and indirectly supporting 20 employees in other industries.

Civilian Labor Force

	Clay County		Labor Market Area	
	2008	Oct. 2009	2008	Oct. 2009
Civilian Labor Force	6,862	6,874	98,775	99,815
Employed	6,153	5,928	91,125	87,751
Unemployed	709	946	7,650	12,064
Unemployment Rate (%)	10.3	13.8	7.7	12.1

Source: U.S. Department of Labor, Bureau of Labor Statistics.

II. Socioeconomic Demonstration- continued

3. The effect on median household income levels in the affected community:

(Compare current median household income levels with projected median household income levels. Discuss how proposed project will positively or negatively impact the median household income in the affected community including the number of households expected to be impacted within the affected community.)

As shown in the following table, the average weekly wage of all industries is \$597 in Clay county in 2008 while the statewide average number is \$720. Mining is the highest pay job in Kentucky; its average weekly wage is \$1,179 in 2008. The average weekly wage in the mining industry in Kentucky is approximately 64% higher compared to the average weekly wage for all industries. Creation of higher-paying jobs will definitely result in the increase of median household income level in the affected community. On the other hand, loss of these jobs would dramatically impact affected employees' household income and their daily life.

Average Weekly Wage, 2008

	Clay County	Kentucky (Statewide)	U.S.	Ohio
All Industries	\$597	\$720	\$876	\$784
Agriculture, Forestry, Fishing and Hunting	0	571	502	493
Mining	0	1,179	1,676	1,166
Construction	731	807	940	887
Manufacturing	449	915	1,047	998
Trade, Transportation, and Utilities	423	665	751	698
Information	393	770	1,324	977
Financial Activities	619	937	1,422	1,023
Services	536	631	781	702
Public Administration	909	794	1,014	969
Other	N/A	869	889	604

Source: U.S. Department of Labor, Bureau of Labor Statistics.

4. The effect on tax revenues of the affected community:

(Compare current tax revenues of the affected community with the projected increase in tax revenues generated by the proposed project. Discuss the positive and negative social and economic impacts on the affected community by the projected increase.)

It is anticipated that the mine operation will produce a total of 708,000 tons of clean coal. This will generate a gross income of \$35, 400, 000 if the coal price is at \$50 per ton. The state coal severance and processing tax revenue will be approximately \$1,593,000. The Federal excise tax and OSM reclamation tax will be approximately \$389,400 and \$223,020, respectively. The personal income tax paid to federal, state and local will be approximately \$120,000 annually if 15 employees are hired at an average annual salary of \$40,000 and an average income tax rate of 20%. The total direct tax revenue to the local, state and federal is \$2,325,420. Additional tax revenue will be produced by local businesses, through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes will also add to revenue brought in by the mining facility.

II. Socioeconomic Demonstration- continued**5. The effect on an existing environmental or public health in affected community:**

(Discuss how the proposed project will have a positive or negative impact on an existing environmental or public health.)

The permit area is pre-law mined land; 33.6 acres of bench area was abandoned mined land without proper reclamation. After mining is completed, the area will be reclaimed according to regulatory requirement. Species indigenous to the area will be planted to establish adequate vegetation cover. Such reclamation will minimize soil erosion and enhance the habitat for aquatic species and wildlife. Sediment ponds will remain during reclamation until bond release. The tax revenue paid to state and federal can be used for environmental protection program such as sewage disposal, sanitation and solid waste disposal, which will have beneficial effects on the existing environment.

6. Discuss any other economic or social benefit to the affected community:

(Discuss any positive or negative impact on the economy of the affected community including direct and or indirect benefits that could occur as a result of the project. Discuss any positive or negative impact on the social benefits to the community including direct and indirect benefits that could occur as a result of the project.)

This project will directly provide higher-than-average income and benefits for at least 15 employees. As a result of this project, 20 employees would be indirectly created or supported in engineering consulting, equipment sales and repair, and fuel/ transportation providers. The continuation of these jobs will lessen government unemployment benefits payout and positively affect the housing market crisis in this tough economic recession. The operating of coal mining and continuation of employment will help the local residents' view on current economic condition and encourage spending. This will encourage creating more jobs in the service area. Thus additional revenue can be created by the businesses and more taxes can be collected by local, state and federal government.

III. Alternative Analysis

1. Pollution prevention measures:

(Discuss the pollution prevention measures evaluated including the feasibility of those measures and the cost. Measures to be addressed include but are not limited to changes in processes, source reductions or substitution with less toxic substances. Indicate which measures are to be implemented.)

This project proposes to use 18 bench sediment ponds to collect runoff from the disturbed area. The wastewater from mining operation will be settled by gravity in the ponds and discharged at required water quality standard. The ponds are designed and will be constructed to meet the effluent requirement.

The nearest wastewater treatment plant to the mine site is in Littleton north of Manchester, which is about 23 miles away. Using truck to transport the waste water to the sewer plant for treatment would incur a great amount of transportation cost; it also reduces the water flow to the Wiles Branch. Much larger ponds would be needed to detain the storm water for delivery. Due to the limited bench width, ponds will have to be built at off-bench sites which would disturb more forest land and create additional pollutions. It is obvious a large amount of additional cost would be needed for this option.

Avoiding this project would produce no additional pollution from this site. However, the abandoned pre-law mined land would not be properly reclaimed and provided long-term positive impact for habitat. Moreover, the local, state, and federal tax revenue of \$2,325,420 would not be realized and the 15 local jobs would be lost. Mining supporting and local service business would not prosper to the same extent.

2. The use of best management practices to minimize impacts:

(Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.)

Sediment ponds designed to accommodate a 25 year 24 hour storm event are the main method for wastewater treatment. BMPs recommended by Division of Mine Permit will also be utilized to aid in sediment control during the construction of sediment ponds and at any off-permit disturbance areas. The following BMPs are recommended by the Division, which may include but are not limited to, any of the following, singly or in combination:

- 1). Basin
- 2). Diversion ditches
- 3). Filter strips
- 4). Land grading and reshaping
- 5). Maintenance of a 100' buffer zone along streams
- 6). Minimization of surface disturbance
- 7). Mulching
- 8). Placement of rip-rap
- 9). Rapid revegetation, especially along stream banks
- 10). Rock check dams
- 11). Silt fence
- 12). Straw bale barriers
- 13). Stream bank stabilization
- 14). Sumps
- 15). Work in periods of no or low flow or dry weather

The BMPs of 2), 4), 6), 7), 8), 11), 12), and 15) will be utilized in this mining application.

3. Recycle or reuse of wastewater, waste by-products, or production materials and fluids:

(Discuss the potential recycle or reuse opportunities evaluated including the feasibility of implementation and the costs. Indicate which of, of these opportunities are to be implemented)

Some water can be used for dust suppression on road, bench, stockpile, or highwall face in mining operations during dry days and some can be used for hydro-seeding when grade work is completed. During a storm event, the storm run off fills up the ponds then settled water is discharged through spillway to stream. The ponds normally do not have discharge in dry days unless snow melting water flows into the ponds. All the ponds are designed to have a minimum one foot to maximum 5 feet between spillway level and the sediment pool level. This stored water can be pumped into water truck and used for dust control purpose or for hydro-seeding purpose.

III. Alternative Analysis - continued

4. Application of water conservation methods:

(Discuss the potential water conservation opportunities evaluated including the feasibility of implementation and the costs. Indicate which of, of these opportunities are to be implemented)

No outsourced water is needed for this surface mining operation. Naturally occurred storm/snow water is collected through diversion ditches by sediment control ponds where solids settling occurs and treated water is discharged at a 24 hour arithmetic average settleable concentration of 0.5 ml/l or less. A very small portion of a storm event rainfall is retained in the pond, which can be used for dust suppression, hydro-seeding, or watering of reclaimed land. The water discharge from this operation is only naturally occurred water.

5 Alternative or enhanced treatment technology:

(Compare feasibility and costs of proposed treatment with the feasibility and costs of alternative or enhanced treatment technologies that may result in more complete pollutant removal. Describe each candidate technology including the efficiency and reliability in pollutant removal and the capital and operational costs to implement those candidate technologies. Justify the selection of the proposed treatment technology.)

The following alternatives for water treatment are evaluated:

Water Treatment Facility: Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. The peak discharge from the pond in this mine site ranges from 21.5 cfs to 53.6 cfs (i.e., 13.9 to 34.6 million gallons per day). This small water treatment facility would not be able to manage this amount of flow, thus either a larger water treatment plant or a larger storage pond is required for this option. The additional cost for a larger water plant or a storage pond would cost more than \$2 millions.

Silt Fences and Straw Bales: Silt fence and straw bale barriers is one of the BMPs recommended by the Division of Mine Permit for controlling sediment of small discharges. This alternative would not be adequate for the discharge flow from each subwatershed a bench pond located.

Chemical Treatment: Flocculants and coagulants may enhance the settling of solids and ions in the wastewater from the mine site. This chemical treatment may reduce the pond size, but it requires additional costs for the chemicals and equipment used to prepare and store the chemical solution. Due to the fact that storm water comes as an event not a continuous operation. This option is very difficult in operational management. The chemical residue in the discharge may also negatively impact the aquatic communities downstream,

Wetland: Wetlands have traditionally been used for biological treatment and are not effective for treating sediment. Additionally, wetlands used for water treatment would require additional nearly flat land which is not available in this project area. The location of the wetland has to take consideration of the entire permit area.

III. Alternative Analysis - continued

6. Improved operation and maintenance of existing treatment systems:

(Discuss improvements in the operation and maintenance of any available existing treatment system that could accept the wastewater. Compare the feasibility and costs of improving an existing system with the feasibility and cost of the proposed treatment system.)

The proposed mine site is pre-law abandoned mined land. Storm water runoff from this site is naturally drained to the Wiles Branch without any man-made treatment. No any existing wastewater treatment facility can be used for water treatment. The proposed bench sediment control pond for water treatment is the feasible and practicable way.

7. Seasonal or controlled discharge options:

(Discuss the potential of retaining generated wastewaters for controlled releases under optimal conditions, i.e. during periods when the receiving water has greater assimilative capacity. Compare the feasibility and cost of such a management technique with the feasibility and cost of the proposed treatment system.)

The wastewater generated in the mine site is the storm water runoff from the disturbed area. The amount of water discharge is natural and seasonal. Controlling of this discharge will change the natural course of the stream downhill. However, it is possible to collect the runoff and discharge it at a controlled manner. Besides the bench ponds designed, a large detention pond would have to be placed in the Wiles Branch near the dwelling #14 to collect and detain the discharges from bench pond SS4 to SS18, and a second detention pond would need to be placed near the gas well south of the existing road A to collect and detain the discharges from pond SS1 to SS3. The engineering, construction and maintenance of these two detention ponds would cost millions. The two detention ponds will also very negatively impacts the Wiles Branch and downstream aquatic communities and posts safety hazards to local residents and wildlife habitat.

III. Alternative Analysis - continued

8 Land application or infiltration or disposal via an Underground Injection Control Well

(Discuss the potential of utilizing a spray field or an Underground Injection Control Well for shallow or deep well disposal. Compare the feasibility and costs of such treatment techniques with the feasibility and costs of proposed treatment system.)

There is no abandoned underground mine near the proposed mine site, so the option of underground injection control well is not feasible.

9 Discharge to other treatment systems

(Discuss the availability of either public or private treatments systems with sufficient hydrologic capacity and sophistication to treat the wastewaters generated by this project. Compare the feasibility and costs of such options with the feasibility and costs of the proposed treatment system.)

The nearest wastewater treatment plant to the mine site is in Littleton north of Manchester, which is about 23 miles away. Using truck to transport the waste water to the sewer plant for treatment would incur a great amount of transportation cost; it also reduces the water flow to the Wiles Branch. Much larger ponds would be needed to detain the storm water for delivery. Due to the limited bench width, ponds will have to be built at off-bench sites which would disturb more forest land and create additional pollutions. It is obvious a large amount of additional cost would be needed for this option.

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:		Telephone No.:	() -
Signature:		Date:	

**Kentucky Pollutant Discharge Elimination System (KPDES)
Instructions
KPDES Permit Application Supplemental Information**

SECTION I – PROJECT INFORMATION

Facility Name: Provide the name of the facility
Location: Provide the physical location of the proposed project
County: Indicate the county in which the facility is located
Receiving Water Name: Indicate the water body into which the facility discharges or plans to discharge.

SECTION II – Socioeconomic Demonstration

For each factor provide a discussion of expected positive and negative impacts. Include appropriate support documentation.

SECTION III – Alternative Analysis

For each alternative compare the feasibility and costs of the alternative to the feasibility and costs of the proposed project and its treatment system. Include appropriate support documentation.


SECTION IV - CERTIFICATION

Name and Title: Indicate the name and title of the person signing the form.
Telephone No.: Provide the telephone number of the person signing the form.
Date: Indicate the date which the form was signed.

This form being part of the permit application must be signed as follows:

Corporation: by a principal executive officer of at least the level of vice president
Partnership or sole proprietorship: by a general partner or the proprietor respectively

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Charlie Collins	Telephone No.:	(606)596-0111
Signature:		Date:	03/26/2010